Abstract of the Disclosure

Provided are a method and an apparatus for detecting the fault of an optical switch. The apparatus includes an optical monitoring signal generator, a coupler, a splitter, a plurality of optical detecting and output power transition sensing units, and a fault determiner. The optical monitoring signal generator generates optical monitoring signals having different wavelengths from optical signals including data to be transmitted. The coupler optically couples the optical monitoring signals to the optical signals including data to be transmitted and inputs the coupled optical signals to an optical switch. The splitter splits the optical monitoring signals from optical signals output from the optical switch. The plurality of optical detecting and output power transition sensing units detect output power transitions of the split optical monitoring signals. The fault determiner receives information on setting the optical switch from an external source, compares the information with the detected output power transitions of the split optical monitoring signals, and determines whether the optical switch malfunctions depending on whether the information coincides with the detected output power transitions of the split optical monitoring signals.